Solve for x.

1. $3x + 1 = 19$
2. $-x - 4 = -17$
3. $7(2x + 4) = -14$
4. $3x + 4 = 4x + 2$
5. $3x - 7(2x - 13) = 3(-2x + 9)$
6. $3x + 2y = 9$
7. $\frac{x}{a} + 1 = \frac{x}{b}$

④ $3x + 4 = 4x + 2$

$-3x \qquad -3x$

$4 = 1x + 2$

$-2 \qquad -2$

$2 = x$

(5) $3x - 7(2x - 13) = 3(-2x + 9)$

$3x - 14x + 91 = -6x + 27$

$-11x + 91 = -6x + 27$

$+11x \qquad +11x$

$91 = 5x + 27$

$-27 \qquad -27$

$64 = 5x$

$x = 12.8$

(6) $3x + 2y = 9$

$-2y \quad -2y$

$\frac{3x}{3} = \frac{9 - 2y}{3}$

$x = 3 - \frac{2}{3}y$

7

$$\frac{x}{a} + 1 = \frac{x}{b}$$

$$-\frac{x}{b} \qquad -\frac{x}{b}$$

$$\frac{x}{a} - \frac{x}{b} + 1 = 0$$

$$-1 \qquad -1$$

$$(1)\frac{x}{a} - \frac{x}{b} = -1$$

$$\left(\frac{b}{b}\right)\frac{x}{a} - \left(\frac{a}{a}\right)\left(\frac{x}{b}\right) = -1$$

$$(ab)\frac{xb - xa}{ab} = -1(ab)$$

$$xb - xa = -ab$$

$$x(b-a) = -ab$$

$$\frac{x(b-a)}{(b-a)} = \frac{-ab}{b-a}$$

$$x = \frac{-ab}{b-a}$$

$\frac{1}{2} + \frac{1}{3} = ?$

LCD: 6

$$\frac{3}{3}\left(\frac{1}{2}\right) + \frac{2}{2}\left(\frac{1}{3}\right)$$

$$\frac{3}{6} + \frac{2}{6} = \frac{5}{6}$$

HW: 1.3, p.21

1-10, 17-22

odd

31, 35, 52